

Projects presented during the EU CAP Network workshop 'Promoting pollinator-friendly farming'

18 – 19 June 2024 | **Ljubljana, Slovenia**



Funded by
the European Union



www.certifiedbeefriendly.org



DESCRIPTION OF THE CONTEXT

Pollinators are threatened by agricultural practices and lack of consideration by the agri-food sector.

Farmers and food industry need knowledge, support and value to change their practices.

BEE FRIENDLY provide expertise, training program and certification to support the change of practices.

INNOVATION(S)/GOOD PRACTICE(S):

- High expertise on pesticides: impact on bees, adoption of alternatives, best practices
- Agroforestry, biodiversity, management practices to provide resources and habitat for pollinators
- Food product certification “BEE FRIENDLY – I protect bees” to promote involved farmers

PROJECT CHALLENGES:

Convince food industry to change and invest in biodiversity and pollinators restoration without binding regulations.

SUCCESS FACTORS:

Farmers mainly want to do well and learn more about their practices. Key factor is to give them practical information and adapted advices regarding their system and location.

IMPACT:

- more than 6000 farmers trained in 2023
- 580 farms with Bee Friendly certification
- 21 agricultural productions (including breeding)
- + 25 000 visits to Toxibeas: our digital tool to provide information about pesticides toxicity



GEOGRAPHICAL LOCATION:

Farmers are mainly from France, also in Belgium, Germany and Spain

INVOLVED ACTORS:

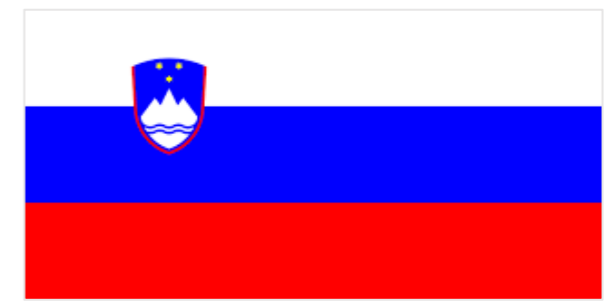
Farmers, beekeepers and naturalists (wild bees and pollinators experts), supermarkets, food industry

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

www.certifiedbeefriendly.org

www.toxibeas.certifiedbeefriendly.org





Danilo Bevk

<http://www.nib.si/>

DESCRIPTION OF THE CONTEXT

The Alps have diverse natural, agricultural, and small urban areas, but connectivity between ecosystems is often lacking. Implementing Green Infrastructure (GI) at the local level is an effective way to support ecosystem services, though GI is still scattered. The FRACTAL project involves local stakeholders in GI implementation. The goals are to standardize GI planning requirements for municipalities and to develop an education toolkit to raise awareness among citizens and pupils.

INNOVATION(S)/GOOD PRACTICE(S):

The project focuses on protecting pollinator habitats, especially colorful flowering meadows.

PROJECT CHALLENGES:

How to address different target groups (farmers, children, the general public, local authorities).

SUCCESS FACTORS:

In the project, we applied the knowledge gained from previous projects in practice at an international level.

IMPACT:

Better understanding of the importance of wild pollinators and measures for their protection.

Interreg  Co-funded by
the European Union

Alpine Space

FRACTAL

GEOGRAPHICAL LOCATION:

Italy, Slovenia, Austria

INVOLVED ACTORS:

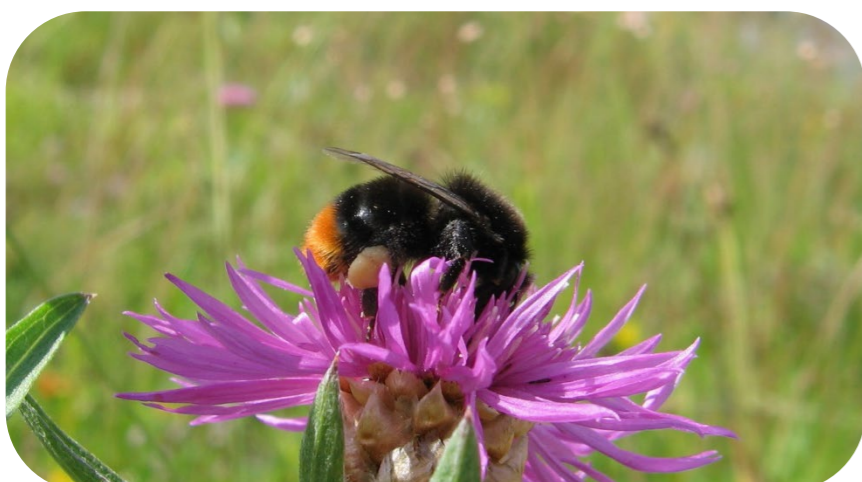
Free University of Bolzano-
Bozen (Lead partner)

National Institute of Biology
Triglav national park

Burgenland Business Agency

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

<https://www.alpine-space.eu/project/factal/>



Monitoring insects in sunflower fields

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Carinthia University of Applied Sciences

UNESCO Chair on Sustainable Management of Conservation Areas



<http://helexproject.eu/>



DESCRIPTION OF THE CONTEXT

- HelEx is funded by Horizon Europe to develop sunflowers tolerating extreme drought and heat.
- We assess impacts of climate-smart varieties on biodiversity and pollinator communities using camera trapping and molecular methods including environmental DNA (eDNA) sampling.
- Targets include: order Lepidoptera, families Halictidae and Syrphidae, genera *Apis* and *Bombus*.

INNOVATION(S)/GOOD PRACTICE(S):

- Sampling eDNA is a unique approach with potential as a standardised method for monitoring species.
- With reference images of key species, camera trapping for insects is becoming more and more precise.
- eDNA and camera trapping have clear advantages because they do not kill plants or animals.

PROJECT CHALLENGES:

- Verifying types of flower-visiting insects;
- Optimising eDNA laboratory work;
- Identifying insects with artificial intelligence.

SUCCESS FACTORS:

- Refining ethical ways to record insects;
- Determining plant traits that attract beneficial insects: nectar and pollen quantities and quality, UV reflection.

IMPACT:

- Developing user-friendly ways to document insect biodiversity in sunflower fields;
- Promoting climate-smart varieties;
- Transferring potential methods to other crops.

GEOGRAPHICAL LOCATION:
Fields in e.g. Austria, France, Germany, Serbia

INVOLVED ACTORS:

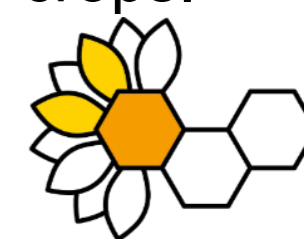
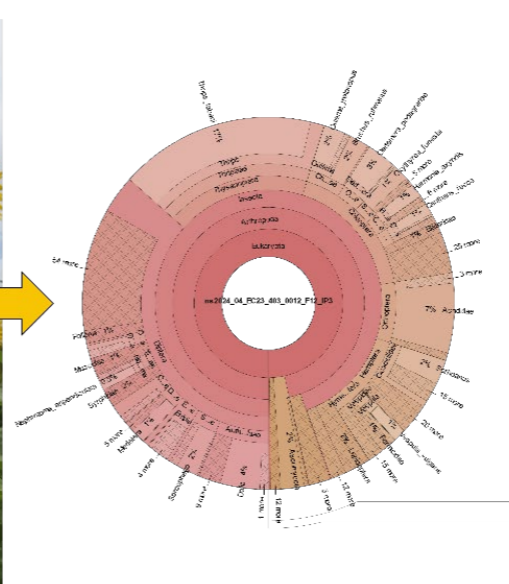
Project Lead: INRAE, France;
17 additional institutions, businesses;
Collaborating farmers.



FURTHER RESOURCES:

<https://www.cuas.at/unesco-chair>

https://eu-cap-network.ec.europa.eu/index_en



HelEx

Photo credits: upper left © Vid Švara, CUAS; lower left © Nicolas Blanchet, INRAE; lower right © Vid Švara, CUAS

This project has received funding from the European Union's Horizon Europe programme under grant agreement N° 101081974

This poster was presented at the EUCAP Network Workshop 'Promoting pollinator-friendly farming' Ljubljana, 18-19 June 2024

More information: <https://eu-cap-network.ec.europa.eu/>



Funded by the European Union



www.triesdorf.de



DESCRIPTION OF THE CONTEXT

Promoting biodiversity in the field can be so easy: with so-called beetle banks. The earthen walls planted with grasses and flowering crops are an oasis for beetles, wild bees, etc. And for farmers, they also represent an attractive alternative to classic flower strips or field shrubs.

INNOVATION(S)/GOOD PRACTICE(S):

The main focus is on the pollen spectrum and the amount of pollen collected at the test locations. Together with a Konstanz entrepreneur, targeted pollination with mason bees (*Osmia Cornuta*) is being tested in the orchards in Triesdorf. The aim is to find out whether the precise use of wild bees can improve yields quantitatively and qualitatively. Studies of the interactions between honey and wild bees also play a role in the project and should lead to appropriate recommendations for action.

PROJECT CHALLENGES:

The overarching project goal is, on the one hand, not to restrict primary agricultural production and at the same time to develop strategies to preserve and further develop biodiverse areas.

SUCCESS FACTORS:

On the LLA site there are insect cameras, forage scales, digital bee hives, etc., which can record possible influences of land management on biodiversity. At the same time, numerous companies and organizations involved in the project work together as closely as possible to share the know-how and ultimately efficiently and to project collectively into the landscape.

IMPACT:

If planted appropriately, honeybees in particular benefit from the walls in every aspect. Reason enough to support the creation of new Beetle Banks from a beekeeping perspective - perhaps even in a joint project with your local farmer.

GEOGRAPHICAL LOCATION:

Weidenbach in Northern Bavaria, Germany.

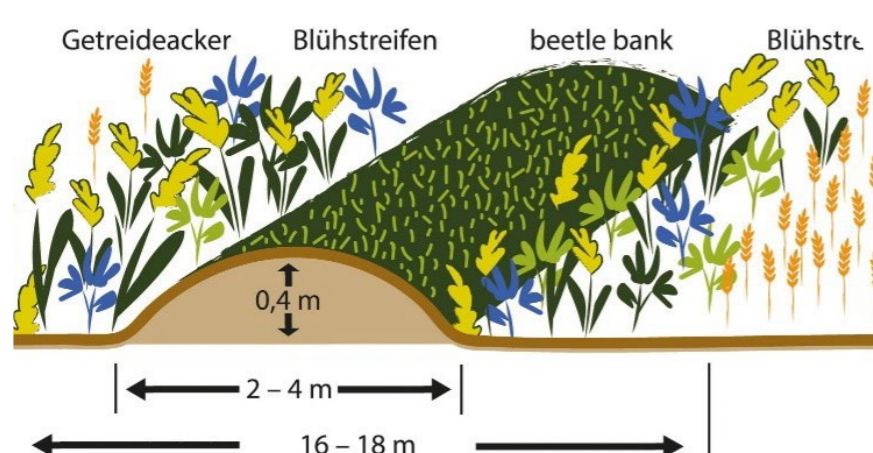
INVOLVED ACTORS:

LLA Triesdorf, University of Weihenstephan-Triesdorf, LWG Veitshöchheim

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

www.triesdorf.de

www.biene-und-baum.de





www.boerennatuur.be



DESCRIPTION OF THE CONTEXT

System approach:

- Increase population beneficial insects (pollinators & natural enemies)
- Stimulating functional agrobiodiversity (FAB)
- Reduce external inputs (crop protection products)

INNOVATION(S)/GOOD PRACTICE(S):

- FAB flower strips (FABulous Farmers)
- Wood edges
- Beetle banks (Partridge)
- Beehives

PROJECT CHALLENGES:

- Monitoring by farmers (pest and beneficial insects in crops)
- Quantifying financial impact
- Increase economical profitability
- Approach on field, farm, and landscape level

SUCCESS FACTORS:

- Ecological effectiveness confirmed
- Work with groups of farmers
- Foster exchange between farmers

IMPACT:

- Strengthen population of pollinators on landscape level
- Peer to peer learning between farmers
- Increase farmers' knowledge

GEOGRAPHICAL LOCATION:

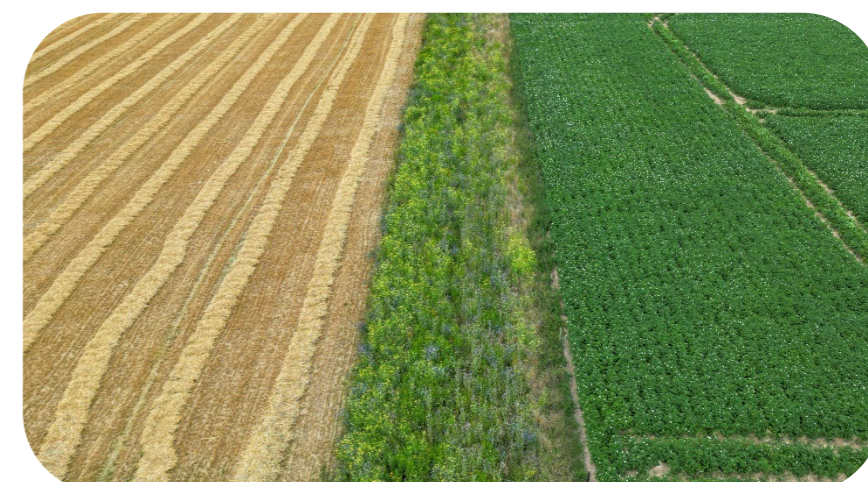
- Flanders (Belgium)

INVOLVED ACTORS:

- Boerennatuur Vlaanderen
- Farmers
- Researchers
- Farm & nature organisations
- Policy makers

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

- www.boerennatuur.be
- www.fabulousfarmers.eu
- ine.deroo@boerennatuur.be

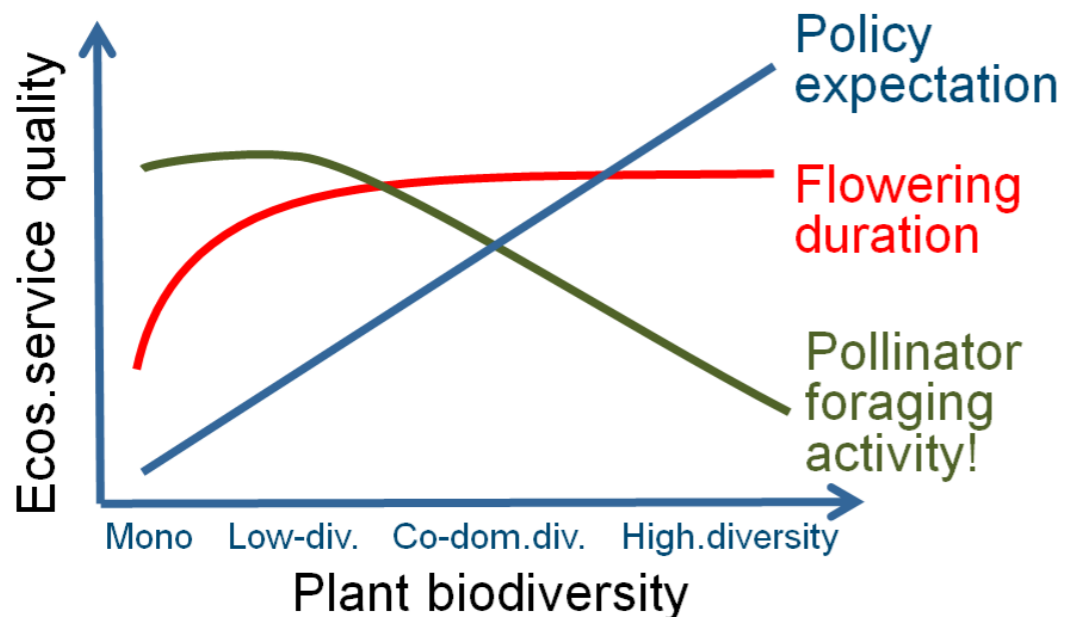


Bee-forage fields

Jaan Liira



University of Tartu, Estonia



DESCRIPTION OF THE CONTEXT

Honey bees, bumble bees and other wild pollinators need forage support as agricultural landscape has lost natural forage areas.

INNOVATIVE PRACTICE:

Estonia has an eco-scheme measure – the bee-forage field-complex.

At least three melliferous crops should be cultivated as monocultures or as a species mixtures.

PROJECT CHALLENGES:

Optimize the ecological-efficiency of practice: Are bees attracted by flower richness?

SUCCESS FACTORS:

Defining the most attractive diversity level of forage mixtures for bees.

IMPACT:

Annual mixtures have prolonged flowering, but monocultures and low-diversity mixes attract more honey bees and bumble bees to forage. In croplands, a mosaic of monocultures and low-diversity mixes should be used for supporting social bees. The method to test forage species and their mixtures is provided.

LOCATION: Estonia

INVOLVED ACTORS:

Farmers, beekeepers, bees

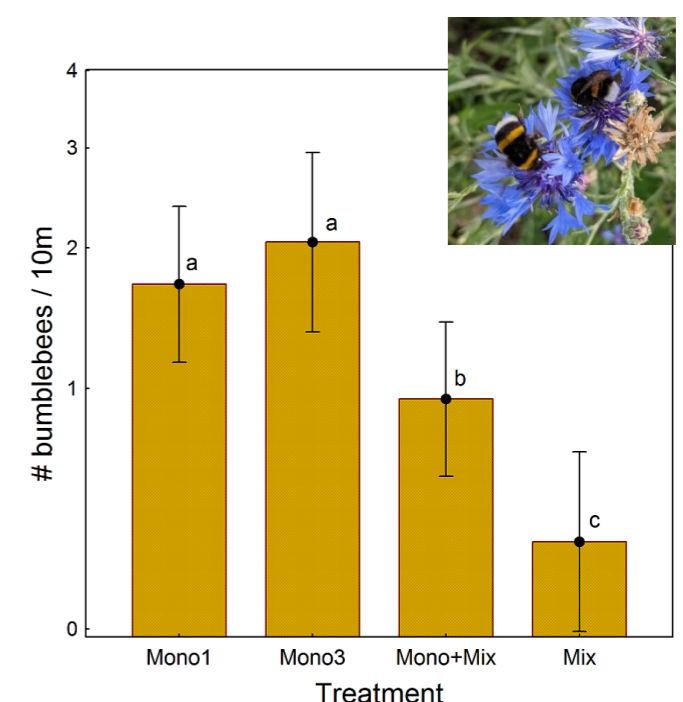
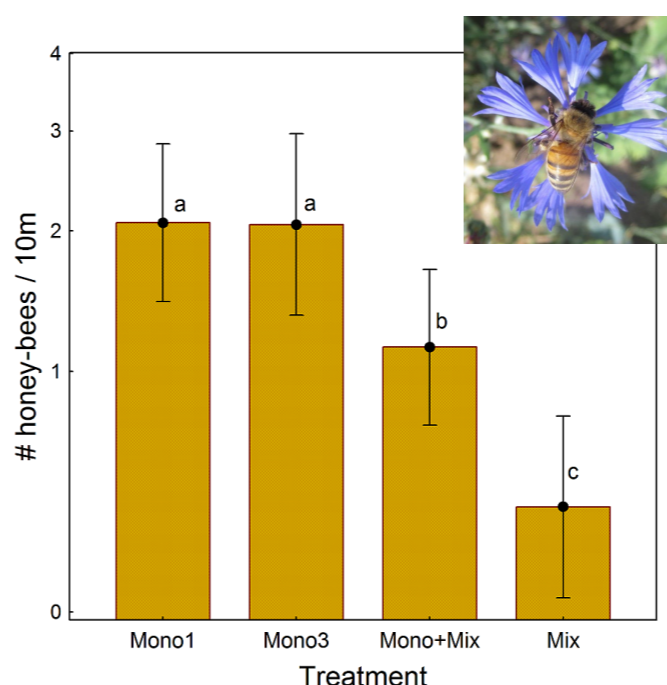
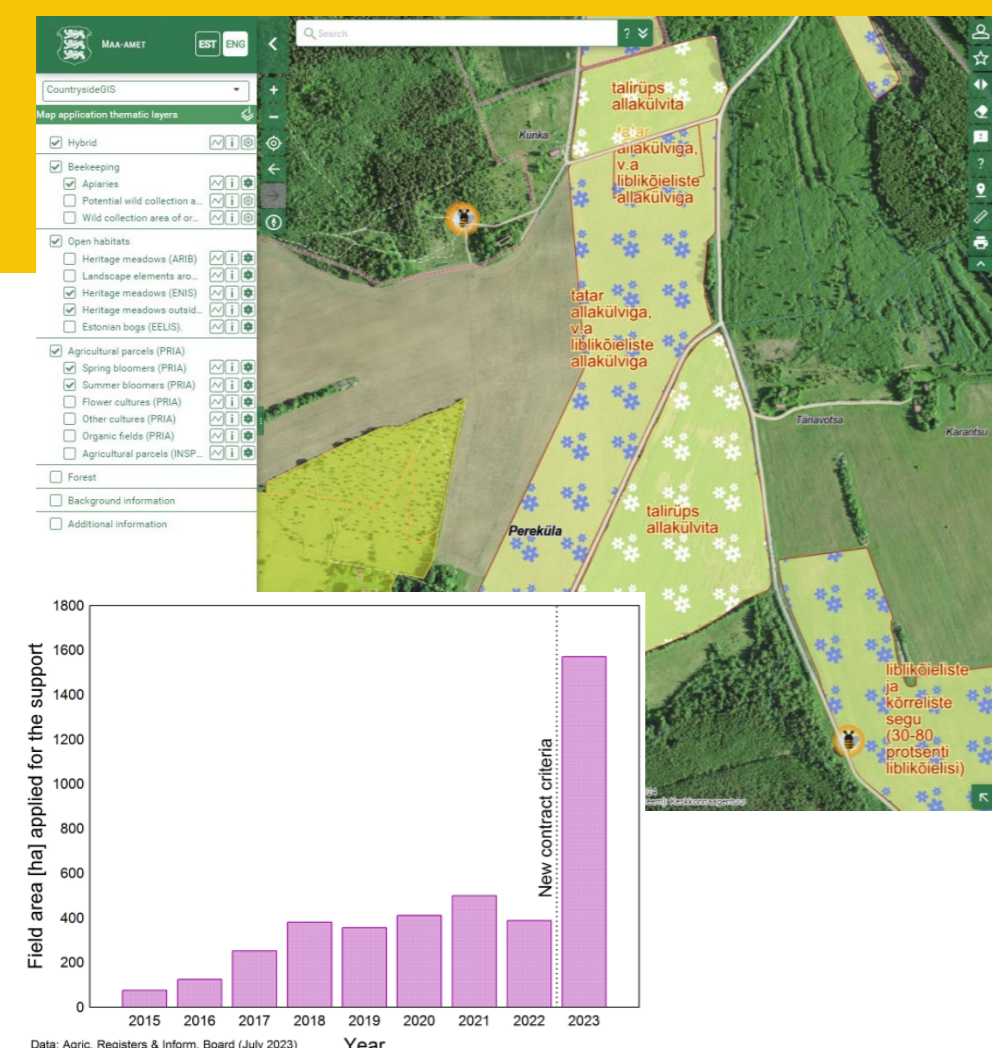
INFORMATION:

Publication: Liira & Jürjendal 2023. Are bees attracted by flower richness? Implications for ecosystem service-based policy, Ecological Indicators, 154, 110927, doi.org/10.1016/j.ecolind.2023.110927

General: project-effect.eu
Specific: effect.ut.ee

GIS-information tool for Estonia - CountrysideGIS:

xgis.maaamet.ee/xgis2/page/app/maaeluGIS





<https://www.framework-biodiversity.eu/>



DESCRIPTION OF THE CONTEXT

The aim of FRAMEwork is to test and evaluate the Farmer Cluster concept in terms of potential benefits to biodiversity (including pollinators), social change and economics. The project also aims to provide technological support to help Farmer Clusters reach their goals.

INNOVATION:

Farmer Clusters are groups of farmers, located in the same region, who work together to share knowledge, support and motivate one another to conserve and enhance the biodiversity and ecological health of their farming landscapes. Farmers set their own priorities and targets, with several Farmer Clusters choosing to focus on pollinator conservation.

PROJECT CHALLENGES:

Scale of impact varies by country owing to differences in farm size, type, culture and history.

SUCCESS FACTORS:

Peer to peer learning drives farmer motivation leading to increased conservation actions.

IMPACT:

Habitat intervention type and placement are guided by a group facilitator. This ensures greater connectivity and complementary (e.g. provide a mix of nesting and foraging habitat) of habitats which can be delivered at scale.

GEOGRAPHICAL LOCATION:

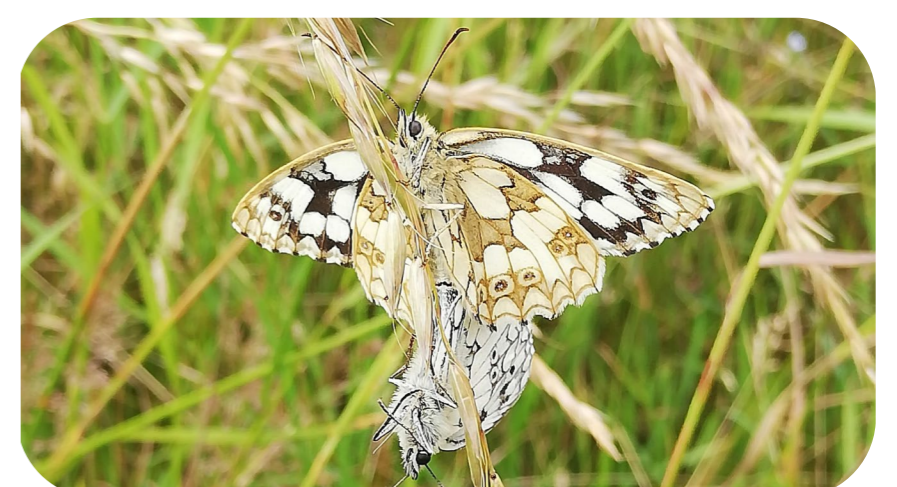
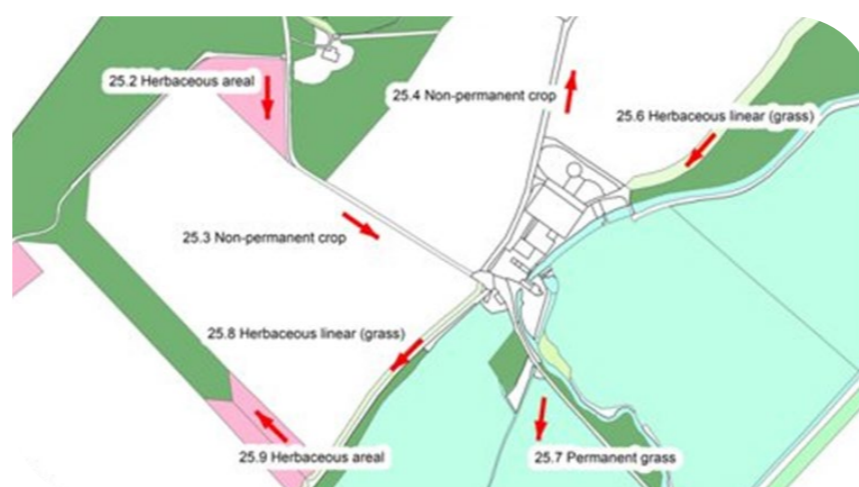
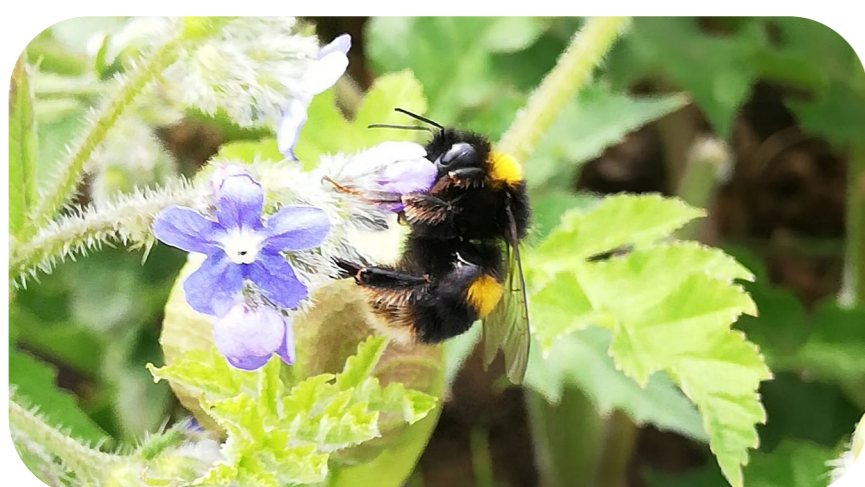
Scotland, England, Estonia, Czech Republic, Austria, Italy, Luxemburg, France, Spain

INVOLVED ACTORS:

Farmers, Researchers, NGO's, Volunteers

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

Project information hub:
<https://recodo.io/>



Companion cropping in oilseeds

Sari Peltonen



www.proagria.fi, <https://ecostack-h2020.eu/>



The objective of EcoStack was to develop and support ecologically, economically and socially sustainable crop production via enhancement of ecosystem services provision and protection of functional biodiversity.



ecostack-h2020.eu/knowledge-bank/

DESCRIPTION OF THE CONTEXT

Oilseed rape is one of the major crop cultivated across Europe but farmers are facing troubles to manage insect pests to maintain crop yield. Flea beetle and pollen beetle are the main insect pests in oilseed crops in Finland. Use of insecticides is restricted and may also cause harmful effects to pollinators.

Alternative insect control methods have to be found to make the cultivation of oilseed crops possible in the future. Oilseed crops are important sources of nectar and pollen for different pollinators.

INNOVATIONS/GOOD PRACTICES:

One solution is to increase plant diversity in the fields in order to disturb and manage insect pests without using chemical inputs. These crops may also favor pollinators. Companion cropping (intercropping) and trap cropping were tested here.

PROJECT CHALLENGES:

The insect pest pressure may be so high that these practices are not strong enough to control especially pollen beetle and the experiments may thus fail. It can also take few years before the method is stable and the population of natural enemies has increased.

SUCCESS FACTORS:

Increasing plant diversity offers a new way to help farmers managing pests in the field. It could also provide other ecosystem services such as soil improvement and biodiversity support to preserve soil from erosion or support pollinators and natural enemies. These practices also reduce input costs.

IMPACT:

Beyond insect pest management, the companion crops showed other positive impacts as they can extend the flowering time and give weed regulation. Trap crops reduce the need of chemical control in the rest of the oilseed cultivation area.



Companion cropping with lentil in oilseed rape (Photo: Terre-net)



Trap cropping with turnip rape in oilseed rape field (Photo: RRes)





<https://finka-projekt.de/>



DESCRIPTION OF THE CONTEXT

Agriculture is cited as one reason for the loss of biodiversity. Within the project, conventional farmers refrain from using pesticides and work together with organic farmers.

INNOVATION(S)/GOOD PRACTICE(S):

Conventional farmers are testing the impact of not using herbicides and insecticides on plant and insect diversity in their fields and on yields. They are supported by organic farmers with knowledge, hoes and harrows to combat weeds and ensure stable yields.

PROJECT CHALLENGES:

Integrate mechanical weed control into conventional agriculture as an alternative to pesticides and attempt to measure the positive effects on arable flora and insects through accompanying scientific research. At the same time, all costs are recorded in order to calculate the subsidies that would be required for such a pesticide-free approach.

SUCCESS FACTORS:

Networking and reaching as many farmers as possible with the project and establishing mechanical weed control in conventional arable farming as an alternative to pesticides.

IMPACT:

Avoiding pesticides has a positive effects on appearance of segetalflora in the fields. The measure is cheaper to implement in cereals than, for example, maize or sugar beet.

GEOGRAPHICAL LOCATION:

Lower Saxony, Germany

INVOLVED ACTORS:

- Kompetenzzentrum Ökolandbau Niedersachsen GmbH
- Netzerk Ackerbau Niedersachsen e.V.
- Farmers' association (Landvolk)
- Georg August Universität Göttingen
- Leibniz-Institute for the Analysis of Biodiversity Change

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

Leen Vellenga, Jana Tempel





<https://biodiversityireland.ie/projects/farmer-moth-monitoring-project/>



DESCRIPTION OF THE CONTEXT

A non-lethal moth monitoring protocol was developed.

- Twenty farmers independently operated moth traps and successfully monitored moths on their farms.
- Collectively, the moth traps were operated on 180 occasions by the farmers between the end of June and mid-October 2022.

INNOVATION(S)/GOOD PRACTICE(S):

Farmer led pollinator monitoring scheme.

PROJECT CHALLENGES:

- Weather conditions
- Purchasing traps
- Quality of moth images received

SUCCESS FACTORS:

- General interest and willingness of farmers to engage in and contribute to citizen science.
- Development of resources to support farmers.

IMPACT:

- Almost all the farmers' sites represent new locations for each of the 112 species recorded.
- Nationwide, a longer-term monitoring scheme whereby the distributions and population trends of moths on Irish farmland is kicking off in 2025.

GEOGRAPHICAL LOCATION:

Counties Kildare, Laois and Wicklow, Ireland

INVOLVED ACTORS:

Twenty farmers

Protecting Farmland Pollinators EIP Operational Group - Researchers, Farm advisors, Local food authorities, and Commercial companies

SOURCES OF INFORMATION, REFERENCES, WEBSITES:



The Farmer Moth Monitoring Project is an EIP (European Innovation Partnership) project being administered by the National Biodiversity Data Centre. The Project is funded by the EU Recovery Instrument Funding under the Rural Development Programme 2014-2022.



This poster was presented at the EUCAP Network Workshop 'Promoting pollinator-friendly farming' Ljubljana, 18-19 June 2024
More information: <https://eu-cap-network.ec.europa.eu/>



Funded by the European Union

Sweden Blossom

A collaboration for happy pollinators

Mattias Hammarstedt



Hela Sverige blommar - Hushållningssällskapet



DESCRIPTION OF THE CONTEXT

Hela Sverige Blommar “Sweden Blossom” is a collaborative project. The project involves several actors. Hushållningssällskapet administers and plans the measures, sponsors ensure that farmers have access to seeds, and farmers set aside land and pay for the sowing of the seeds. Even if each individual contribution is relatively small, the gain is all the greater through collaboration!

INNOVATION(S)/GOOD PRACTICE(S):

The innovation here was to package everything related to the flower sowing in a simple package for the farmer. So he just had to decide to sow flowers and the project would solve the rest. Seed mixing, sowing with a contractor, advice on care etc...

PROJECT CHALLENGES:

The biggest challenges have been to get the advisors to dare to talk about flowers with the farmers. They want to focus on production-driving measures, flowers they thought were a bit fuzzy in the beginning. The least difficult thing was to get the farmers to be involved in the project.

SUCCESS FACTORS:

The biggest success factor has been the simplicity and voluntariness, as well as removing all obstacles from thought to action.

IMPACT:

Before the start of the project, hardly any flowers were grown in the Swedish Arable Landscape. The project has meant that today at least 2000ha of flowers are grown. The project has also had an impact on CAP in Sweden and made flowerstrips be part of the Eco schemes.

GEOGRAPHICAL LOCATION:

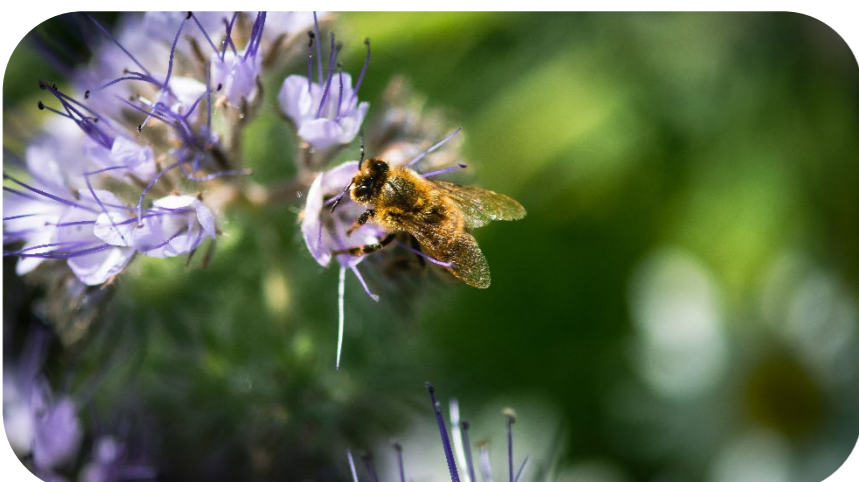
Sweden

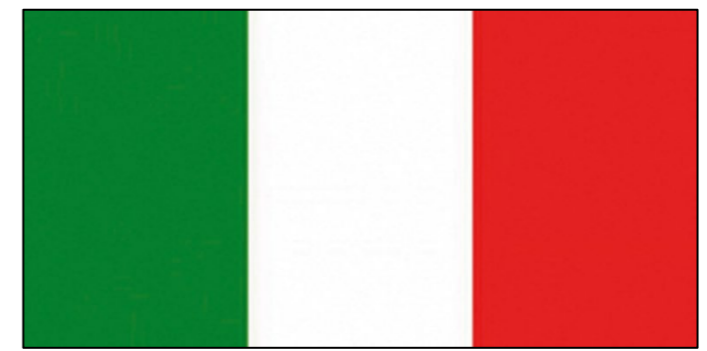
INVOLVED ACTORS:

Hushållningssällskapet project owners, 750 farmers and 28 Sponsor Partners

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

[Hela Sverige blommar - Hushållningssällskapet \(hushallningssallskapet.se\)](https://hushallningssallskapet.se)





<https://www.lifebeeadapt.eu/>



DESCRIPTION OF THE CONTEXT

LIFE project *BEEadapt a pact for pollinator adaptation to climate change* is co-funded by the EU through the LIFE program, under the subprogram geared toward climate adaptation actions. The project started on September 1, 2022 and will run for 48 months.

The key objective of LIFE BEEadapt is to implement a comprehensive climate change adaptation strategy for pollinators. The project puts at the core the benefits deriving from enhancing ecological connectivity through GI for increasing resilience of different areas (urban, rural, protected areas).

INNOVATION(S)/GOOD PRACTICE(S):

- Abacus of practices to design pollinators-oriented Green Infrastructure (GI) in rural, peri-urban and urban areas
- Technical Board to establish criteria for the payment of pollination-related ecosystem services and the inclusion of pollinators-oriented measures in planning tools, for replication of project results
- Governance model improving public bodies' administrative capacity on adaptation and involving farmers in GI design and management (The Pact)
- Protocol for pollinators-friendly adaptation

PROJECT CHALLENGES:

- right commitments at policy level in order to embed BeeAdapt approach in public administration policy and regulative/planning tools (i.e. Regions, Provinces, Municipalities, Protected Areas Authorities), namely: (i) schemes/models defining rewarding criteria for pollinators-oriented measures in funding resources and calls, and (ii) criteria for integrating pollinators-oriented GI in planning instruments;
- active interaction with institutions to guide the definition of rural development measures in favor of pollinators
- the application of effective farmer involvement and remuneration models (such as land stewardship agreements) for a good replication of the actions tested in the pilot areas

SUCCESS FACTORS:

The project is still ongoing. At the moment the positive aspects are:

- the good response of farmers in the pilot areas. They found the BEEadapt approach convenient and provided some useful indications to make governance more efficient;
- the involvement, through the Technical Table, of all the other actors who are dealing with pollinators in Italy, which has allowed the systematization of some activities
- the development of a methodology that allows the development of accurate climate scenarios at the local scale

IMPACT:

- involvement of local farmers in adhering to the Pacts and applying BEEadapt approach (target: at least 20% of farmers located in the target areas sign the Pacts and apply sustainable pollinators-oriented agronomic practices during the project)
- integration of LIFE BEEadapt criteria into the tenders for the implementation of the RDPs of the 5 target regions for programming period 2021-2027;
- to a 30% increase in pollinator species within 5 years;
- to a 20% increase in of the endangered species present in the study areas within 5 years

GEOGRAPHICAL LOCATION:
CENTRAL ITALY
Toscana-Marche-Lazio

INVOLVED ACTORS:
The LIFE BEEadapt project involves 10 actors: Protected areas – University – Farmers – Private companies – NGO – Municipalities

SOURCES OF INFORMATION, REFERENCES, WEBSITES:
<https://www.lifebeeadapt.eu/>





<https://www.lifepollinaction.eu/>



DESCRIPTION OF THE CONTEXT

LIFE PollinAction aims at increasing **landscape heterogeneity** and connectivity through the creation of a **Green Infrastructure** in rural and urban landscapes as a tool to **mitigate** the **pollination crisis** and help develop multifunctional spaces.

To this aim, it targets both **habitat restoration** or **recreation** and **policy implementation**. To achieve long-term sustainability, concrete actions are associated with assessment of **ecosystem services**, the implementation of **circular economy processes** and **close-to-market** solutions and of agri-environmental **regional policies** for local landholders and users.

INNOVATION(S)/GOOD PRACTICE(S):

- Development of **Green Infrastructure**, which consists of a series of elements of varying size and environmental quality that interact with each other to create a multifunctional system.
- Use of **nature-based solutions** which are cost-effective, and provide environmental, social and economic benefits.
- Design of **circular economy processes** and **close-to-market solutions** to boost farmer competitiveness.

PROJECT CHALLENGES:

- **Habitat restoration/creation:** wrong time of planting (e.g., planting in very cold months) or wrong position of young plants (e.g., hygrophilous plants planted above water level).
- **Habitat management:** lack of coordination in the management of areas (e.g., excessive mowing, no mowing, mowing before flowering).

SUCCESS FACTORS:

- **Stakeholder involvement** since the beginning of the project.
- High degree of **project replicability**.
- **Economic feasibility** of the actions.

IMPACT:

Increase in:

- **Plant, pollinator** and **beneficial arthropods richness**.
- **Green infrastructure distribution**.
- **People awareness**.

GEOGRAPHICAL LOCATION:

Italy: North-Eastern Po Plain

Spain: Aragon

INVOLVED ACTORS:

Ca' Foscari University of Venice

Regione Friuli-Venezia Giulia

Regione del Veneto

Comune di Caldogno

Centro de Investigación y Tecnología Agroalimentaria de Aragón

Veneto Agricoltura

Concessioni Autostradali Venete S.p.A.

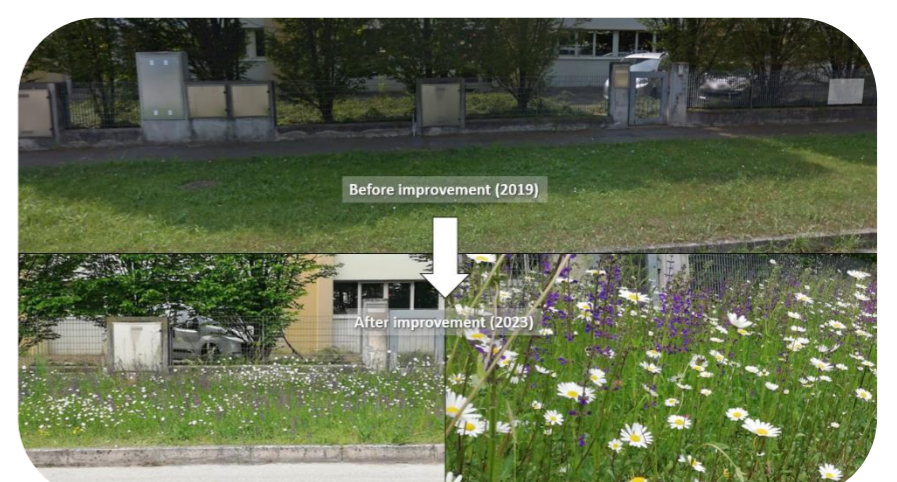
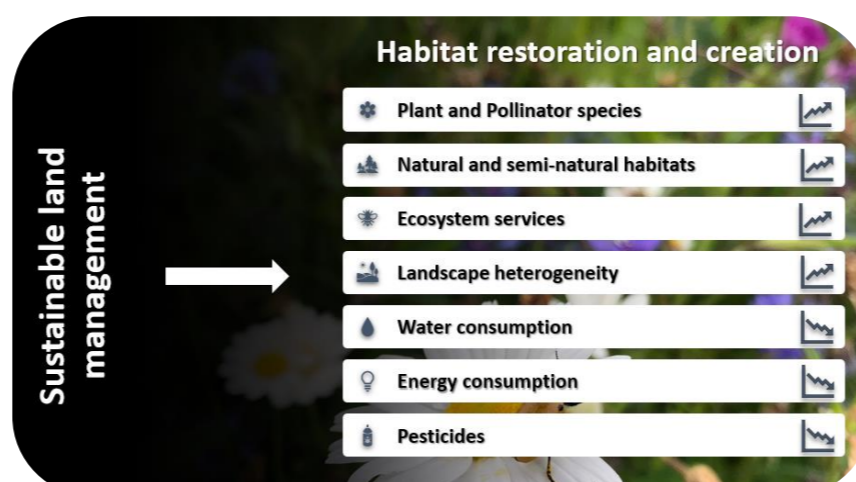
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EcorNaturaSi

Albatros S.r.l.

CONTACTS:

lifepollinaction@unive.it



BEE(A)WARE

Magdalena Trstenjak
Project manager



<http://www.si-hr.eu/2127/hr/?s=BEE%28A%29WARE&lang=hr>



DESCRIPTION OF THE CONTEXT

Multidisciplinary capacity building and development of new solutions in order to conserve, protect, and enhance endangered wild pollinator communities and honeybee within the ecosystems.

INNOVATION(S)/GOOD PRACTICE(S):

The main outcomes of the project are focused on establishing a long-term cooperation among partners and target groups through the creation of a cross-border pollinator protection network. Furthermore, within the project concrete measures and actions will be implemented:

- Wide geographical area - Mura-Drava-Danube Biosphere Reserve, Goričko Nature park, Lendava and Međimurje County.
- Development of a joint Strategic Plan for Sustainable conservation of wild pollinators and honeybee.
- Two pilot interventions will be conducted:
 1. Joint development testing, and validation of a wild pollinator monitoring system (solution like this is currently not established in the mentioned pilot area)
 2. A solution for monitoring climate parameters to create a common database for beekeepers in Lendava and Međimurje region
- Multiple target groups will be actively involved within awareness raising campaigns, training camps etc.

PROJECT CHALLENGES:

- Drastic reduction in the number and habitats of wild pollinators and honeybees
- Lack of communication and collaboration between relevant stakeholders (mainly farmers and beekeepers).
- How to successfully engage stakeholders and specific target groups (mainly farmers)
- Public engagement and awareness campaigns (must be well-planned, targeted, and evaluated)

SUCCESS FACTORS:

- Enhance knowledge and existing practices in the protection and preservation of wild pollinators and honeybee in the cross-border area
- Awareness raising among the general public in order to emphasize the importance of pollinators for biodiversity
- Established EU Pollinator Monitoring Scheme at the pilot area
- Establishment of new solutions that will create databases relevant for further research on the abundance and vulnerability of pollinators

IMPACT:

By adopting a participatory and collaborative approach, a long-term and sustainable impact will be achieved through informing and educating a broader audience and target groups, as increased knowledge and awareness lead to long-term changes in thinking, habits, behavior, and attitudes. This will ultimately have a positive impact on the coexistence of humans and nature.

GEOGRAPHICAL LOCATION:

Mura-Drava-Danube Biosphere Reserve, Goričko Nature park, Lendava and Međimurje County

INVOLVED ACTORS:

Javna ustanova za razvoj Međimurske županije REDEA (LB)

Međimurska priroda – Javna ustanova za zaštitu prirode

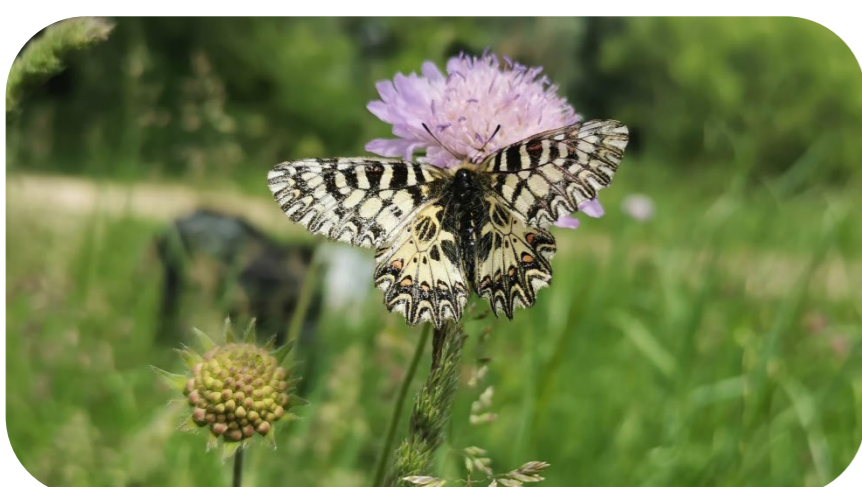
Nacionalni inštitut za biologiju

Javni zavod Krajski park Goričko

Galerija – Muzej Lendava

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

<https://www.facebook.com/profile.php?id=61559968952858>



European Hoverflies: Moving from Assessment to Conservation Planning

Snežana Popov



www.iucn.org/our-union/commissions/group/iucn-ssc-hoverfly-specialist-group



DESCRIPTION OF THE CONTEXT

Insect pollinators such as hoverflies are the second most important pollinator group after bees. Regardless of their numerous roles, their conservation is usually overlooked and neglected.

INNOVATION(S)/GOOD PRACTICE(S):

IUCN European Red List of Hoverflies initiative drafted a preliminary multi-species plan of action for European hoverfly species identified as threatened with extinction.

PROJECT CHALLENGES:

Challenges to the conservation of hoverflies in Europe include changes in land-use and land management practices that favor the removal of microhabitat complexity and heterogeneity. Due to a range of natural resource management decisions and practices, these microhabitats continue to be lost even where macrohabitat is still present.

SUCCESS FACTORS:

The plan shows five broad areas of work needed to support European hoverfly conservation. Each area has a goal, a series of recommended actions, and supporting evidence that sits behind the recommendations.

IMPACT:

This plan shifts from assessing hoverfly populations to implementing conservation strategies, offering evidence-based recommendations and successful case studies to protect and restore hoverflies and their habitats in Europe.

GEOGRAPHICAL LOCATION:

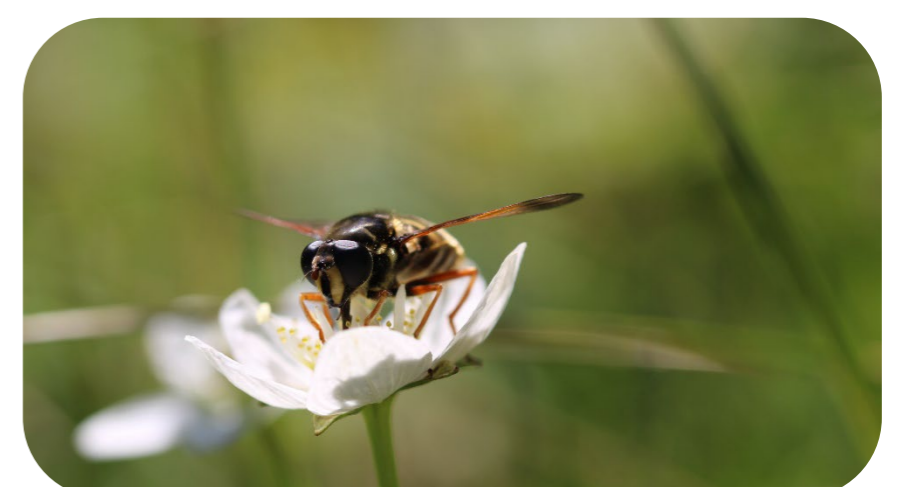
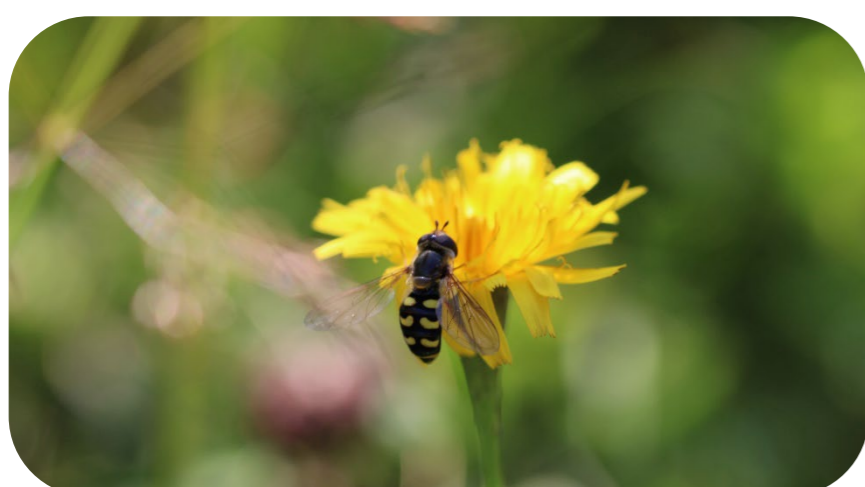
Europe

INVOLVED ACTORS:

IUCN, IUCN Species Survival Commission (SSC), IUCN Hoverfly Specialist Group (HSG), IUCN SSC Conservation Planning Specialist Group (CPSG)

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

IUCN SSC HSG/CPSG (2022). 'European Hoverflies: Moving from Assessment to Conservation Planning. A report to the European Commission by the IUCN SSC Conservation Planning Specialist Group (CPSG) and the IUCN SSC Hoverfly Specialist Group (HSG)'. Conservation Planning Specialist Group, Apple Valley, MN, USA.



Safeguarding European wild pollinators (SAFEGUARD)

Snežana Popov



safeguard.biozentrum.uni-wuerzburg.de



GEOGRAPHICAL LOCATION:

Europe

INVOLVED ACTORS:

SAFEGUARD unites an interdisciplinary team of researchers, NGOs, industry and policy experts from 25 institutions spread across 14 European countries and China to contribute to Europe's capacity to reverse the losses of wild pollinators

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

<https://cordis.europa.eu/project/id/101003476>

E-mail: safeguard@uni-wuerzburg.de

DESCRIPTION OF THE CONTEXT

SAFEGUARD is an EU-funded Horizon 2020 project that aims to substantially contribute to reversing the loss of wild pollinators across Europe through increasing our understanding of the direct and indirect drivers of pollinator declines, environmental, economic and societal impacts.

INNOVATION(S)/GOOD PRACTICE(S):

Conceiving an integrated assessment framework (IAF) that builds on pre-existing and new knowledge syntheses as well as a portfolio of evaluated modelling approaches and decision-making tools.

PROJECT CHALLENGES:

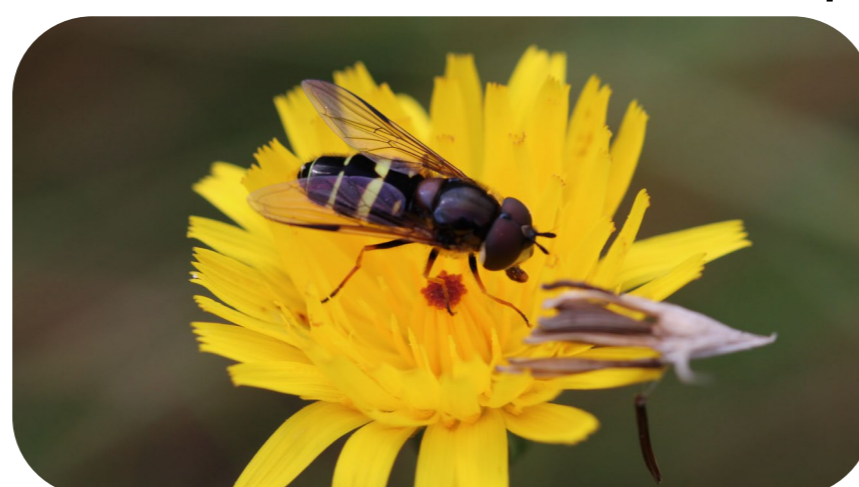
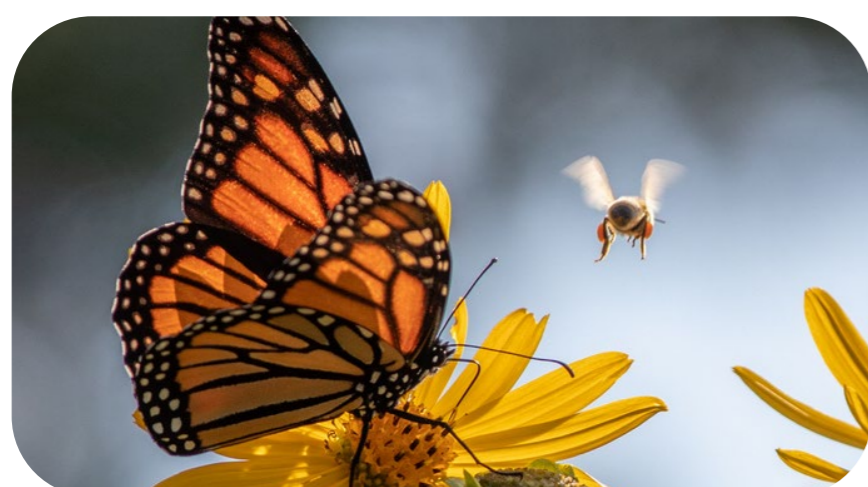
Effectively integrating and coordinating diverse stakeholders' expertise to co-develop usable and relevant knowledge syntheses and decision-making tools.

SUCCESS FACTORS:

Robust collaborative network, the innovative use of cutting-edge models to identify emerging threats, and effective stakeholder engagement to co-develop and test practical solutions that benefit pollinators across various landscapes.

IMPACT:

SAFEGUARD's toolkits and guidance will allow assessment of likely impacts of decisions and risk forecasting **enabling stakeholders to assess their problems and choose the most appropriate responses**. SAFEGUARD will also inform national, European and global policies and decision-making and raise awareness of the contribution of wild pollinators to society.



Abelhas no Recreio

Filipe Teixeira Ribeiro



www.epadriv.edu.pt



DESCRIPTION OF THE CONTEXT

The 'Bees in the Playground' project consists of a series of technical-pedagogical intervention initiatives in the school, the main aim of which is to raise awareness among the school community of the imperative need to preserve and regenerate the biodiversity of the school's agricultural ecosystem, especially pollinating insects, through the application of sustainable agricultural practices and citizen science actions. It also makes it possible to find out the main causes of its decline, with the aim of increasing the school community's levels of ecoliteracy.

INNOVATION(S)/GOOD PRACTICE(S):

The planting of a blueberry orchard (highbush), following ecological agricultural practices that are friendly to pollinating insects, was one of the strategies adopted to involve and raise awareness in the school community about the importance of pollinating insects in the production of small fruits. Today, two years into the plantation, students observe and study the anatomy of the blueberry flower, such as insect-flower interactions and identify, using digital tools and pan traps, the pollinating insects that visit the orchard. They become aware of buzz pollination and the phenomena of nectar theft, representing true moments of learning for future young farmers, who are expected to have greater ecological awareness.

With the project, many friendly agricultural practices have been implemented in the school's agricultural fields: planting wild flowers on the borders of agricultural fields; maintenance of agricultural fields fallow, Ban on the application of pesticides on agricultural fields and school green spaces; maintenance of wild areas and hedges between agricultural fields; planting native species and placing nest boxes for pollinating insects.

PROJECT CHALLENGES:

Mobilize the school community towards the importance of adopting sustainable agricultural practices in the school's agricultural fields / Identify beneficial agricultural practices for pollinators depending on the specificities of the school / Monitoring insects and their identification / Resources available for project implementation. Current challenge: design the project within the network of professional agricultural schools in Portugal, as an example to follow, according to the specificities of the agricultural landscape of each school.

SUCCESS FACTORS:

The school as an example to follow in the agricultural region where it is located (local development) / School community made aware of the importance of pollinating insects in agricultural ecosystems (ecoliteracy and food security) / Increase in sustainable agricultural practices that are friendly to pollinating insects (agroecology and biodiversity) / Monitoring of pollinating insects observed in the agricultural fields of the Citizen Science School (knowledge to preserve) / Transfer of knowledge with reference research centers-Flower lab, PollinizAÇÃO, Polli.NET (Cooperation).

IMPACT:

This project promotes the EPADRV school as a reference in teaching future young farmers who are more aware of agroecology and the preservation of biodiversity in agricultural ecosystems. Young people are the future actors of change towards greener and more ecological agriculture. The school fulfills its role as a pioneering agent of sustainable development in the agricultural region where it is located.

GEOGRAPHICAL LOCATION:

Vagos [Aveiro Region]

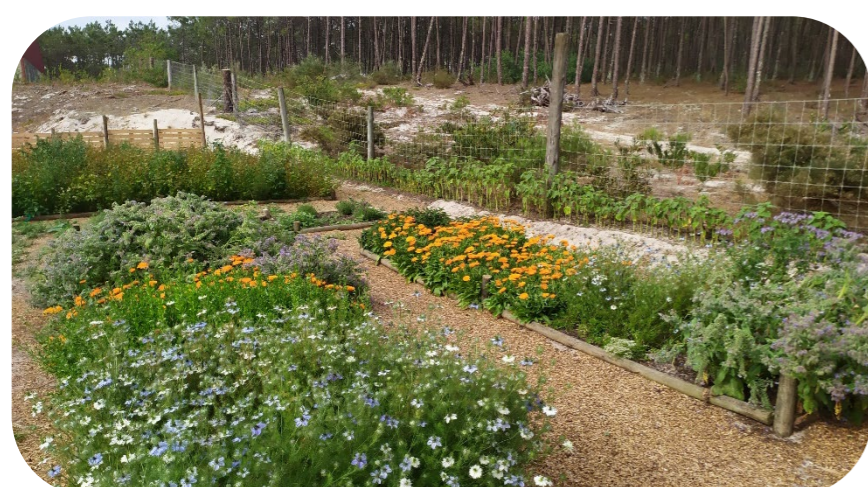
INVOLVED ACTORS:

School community of the Professional School of Agriculture and Rural Development of Vagos (EPADRV)

FLOWer lab - Laboratory of Plant Ecology and Evolution, Pollination Services and Agroecology

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

IPBES, Pollinators, Pollination and Food Production, 2017
<https://www.cienciaviva.pt> [pollinators in action]
<https://www.pollinet.pt/>
<https://wikis.ec.europa.eu/display/EUPKH/EU+Pollinator+Information+Hive> <https://www.inaturalist.org>





www.bienenwald-hessen.de



DESCRIPTION OF THE CONTEXT

Climate change has already arrived in Hessian forests. Many spruce monoculture forests have died due to drought, heat, storms and bark beetle infestation. The OG is testing various reforestation concepts with flowering trees, shrubs and plants that provide food resources for pollinating insects.

INNOVATION(S)/GOOD PRACTICE(S):

This forest conversion leads to multiple uses: wood, non-wood forest products (honey, berries, nuts) and habitats for pollinators. Ecological and economic goals are combined. The effort to increase biodiversity also becomes financially interesting for forest owners.

PROJECT CHALLENGES:

There is no forestry funding for bee-friendly and climate change-compatible forest trees. There was neither knowledge nor recommendations for the new strategy of redesigning forests to be pollinator-friendly.

SUCCESS FACTORS:

The transdisciplinary collaboration with experts from different disciplines and professions has helped to pool diverse knowledge and design a completely new system.

IMPACT:

Within the planted bee forest tree species, bees find food resources in the forest, away from production-oriented agricultural areas and the pesticides used there. In the mixed forest concept, the trees with their different flowering times provide nectar and pollen over a long period of time.

GEOGRAPHICAL LOCATION:

Germany, Hesse

INVOLVED ACTORS:

- Leadpartner: Communis Projektbüro
- LLH Bieneninstitut Kirchhain
- Biohof Ruhlengut
- Hof Niederholzhausen GbR
- Imkerei Auenblick
- Imkerei Beerow

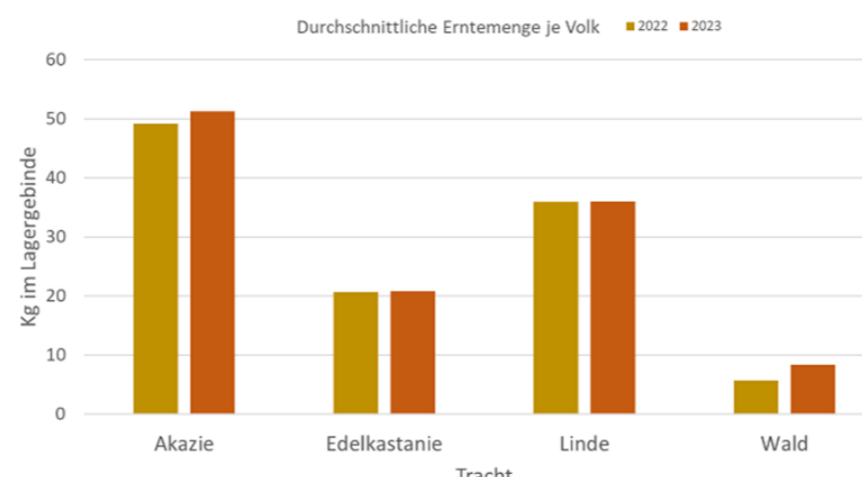
Assoziierte Partner:

- Justus-Liebig-Universität Gießen
- Georg-August-Universität Göttingen
- HessenForst Forstamt Kirchhain
- Forstbetriebsgemeinschaft (FBG) etc.

SOURCES OF INFORMATION, REFERENCES, WEBSITES:

<https://www.hessen-forst.de/presse-und-meldungen/klimakrise-schadet-hessens-waeldern>

<https://llh.hessen.de/ueber-uns/projekte/projekte-umwelt/bienenwald-hessen/>



EU CAP Network workshop 'Promoting pollinator-friendly farming'

18 – 19 June 2024 | **Ljubljana, Slovenia**

All information on the workshop is available on the
event webpage:

<https://eu-cap-network.ec.europa.eu/events/eu-cap-network-workshop-promoting-pollinator-friendly-farming>

